Cotton/Soybean Insect Newsletter

Volume 16, Issue #4 Edisto Research & Education Center in Blackville, SC 21 May 2021

Pest Patrol Alerts

The information contained herein each issue is available via text alerts that direct users to online recordings. I will update the short message often for at least as long as the newsletter runs. After a new message is posted, a text message is sent to alert users that I have recorded a new update. Users can subscribe for text message alerts for my updates in two easy steps. Step one: register by texting **pestpat7** to 97063. Step two: reply to the confirmation text you receive by texting the letter "y" to complete your registration. Pest Patrol Alerts are sponsored by Syngenta.

Updates on Twitter

When noteworthy events happen the in the field, I will be sending them out quickly via Twitter. If you want to follow those quick updates, follow me at **@bugdocisin** on Twitter.

News from Around the State

Jonathan Croft, county agent covering Orangeburg County, reported that he is "seeing a few more thrips this week but nothing bad yet in the cotton I have looked at." **Charles Davis**, county agent covering Calhoun and Richland Counties, reported that "all is quiet here. Waiting for a lot of cotton to come up. Irrigation systems running full speed." **William Hardee**, county agent covering Horry, Marion, and Dillon Counties, reported that they need rain "terribly" in the Pee Dee Region of SC. William also sent in this photo of early stink bug damage to corn that he is seeing pronounced along field edges. Stink bugs can feed on the corn stalk as seedlings and young plants, and, when leaves unfurl later, this damage is noticed. Severe infestations of stink bugs on young corn plants can result in stand reductions, as plants can be killed. Damage later, when the ear is forming, can also be costly, as ears can be deformed and stunted. Damage even later on kernels can be an issue, but it usually is not as bad as early damage. This early sign of activity by stink bugs probably means we will see issues later in cotton and soybeans.

Scouting Workshops and Field Days

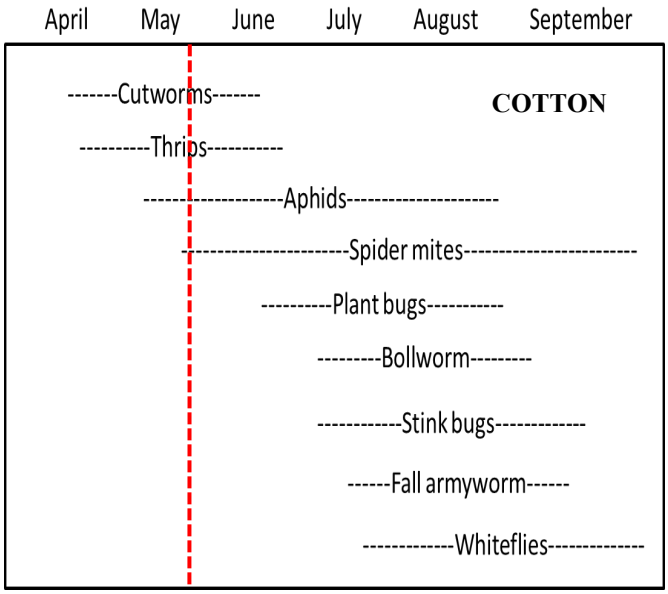
We going to offer several in-field, in-person workshops devoted to scouting for insect issues in cotton and soybeans. These scouting workshops are being scheduled for late July 2021. We will continue to update on progress in planning for those workshops. We are planning to have an in-person field day here at the Edisto REC on 2 September 2021, with at least row crops (cotton, soybeans, peanuts, corn, grain sorghum, etc.) covered. Stay tuned for details on those events.

Cotton Situation

As of 16 May 2021, the USDA NASS South Carolina Statistical Office estimated that about 59% of the crop has been planted, compared with 40% at this time last week, 42% at this time last year, and 48% for the 5-year average. These are observed/perceived state-wide averages.

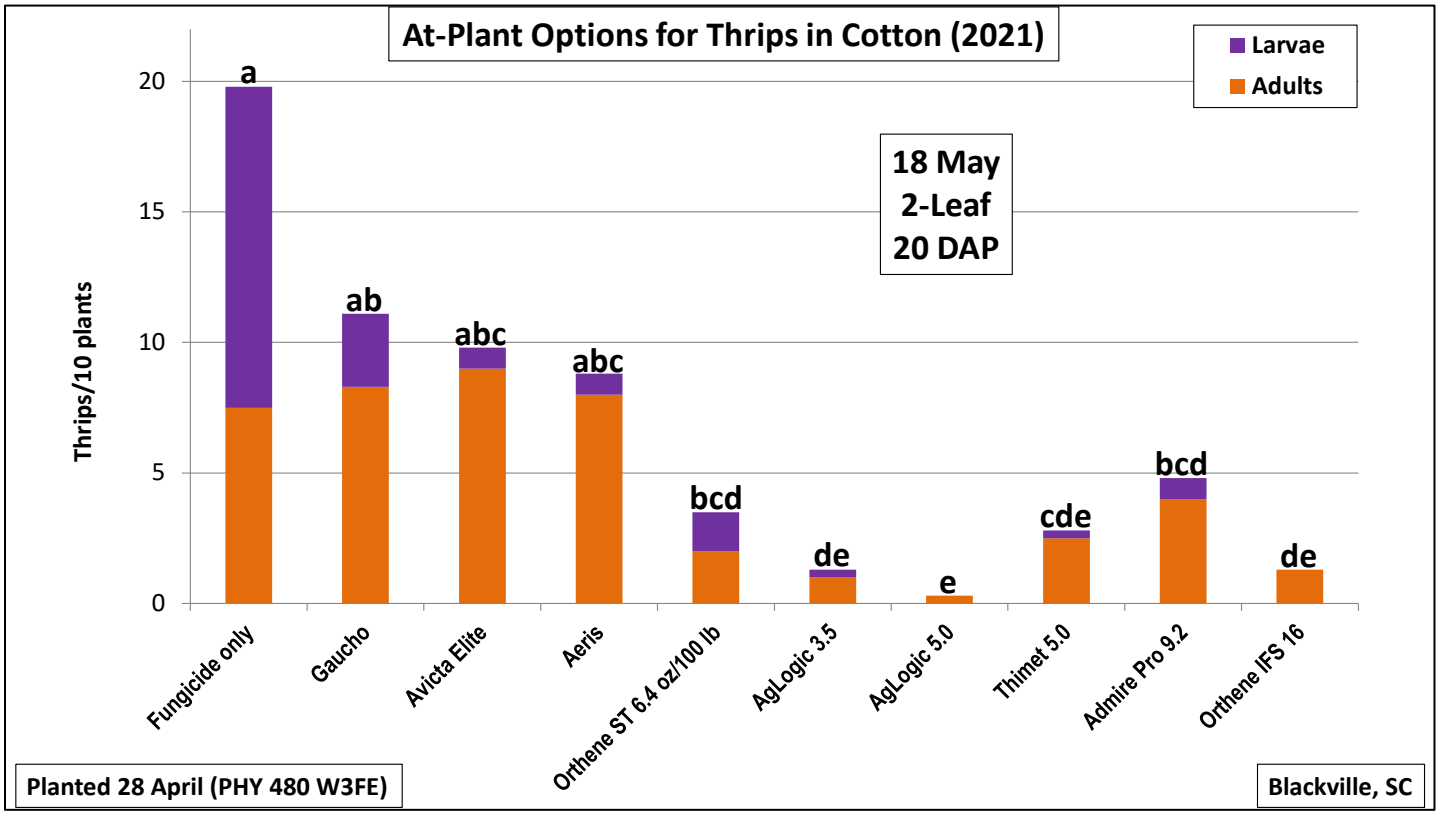
Cotton Insects

Cotton without an at-plant insecticide for thrips planted



on 30 April is sustaining injury from thrips (photo below). On Monday, Dr. Michael Plumblee and I will treat half of these plots with acephate (Orthene 97 at 3 oz/acre) and wash off the insecticide at various intervals with simulated rain. Hopefully, we will generate some data on how much time is required before a rain to maintain good efficacy on thrips. We will also do this experiment for bollworm and stink bugs in separate cotton trials and conduct a couple of additional trials in soybeans for other selected insect pests. This should be pretty cool.

Here are some results from our 2021 thrips trial in cotton testing most of the legal, at-plant options for controlling thrips with insecticides:



As you can see, control plots with seed treated with fungicides only and not receiving any other insecticide at planting had the highest numbers of thrips at 20 DAP (2-leaf cotton). Numbers of thrips sampled in the commercial seed treatments Gaucho (imidacloprid), Avicta Elite (imidacloprid + thiamethoxam), and Aeris (imidacloprid + thiodicarb) were lower but not statistically different from the control. Seed I treated with Orthene (acephate) had lower numbers of thrips, as did an in-furrow spray with Orthene. The in-furrow granular product AgLogic (aldicarb) has provided the best control of thrips so far at 3.5 or 5.0 lb/acre. Thimet (phorate) and Admire Pro (imidacloprid) applied in the furrow as granular and in-furrow spray, respectively, also had lower numbers of thrips than the control and commercial seed treatments.

I will provide some details from our other thrips trials (foliar insecticides, Thryvon Bt trait for plant bugs and thrips, and a couple of thrips/nematode trials we have with Dr. Mueller) in the next couple of newsletters.

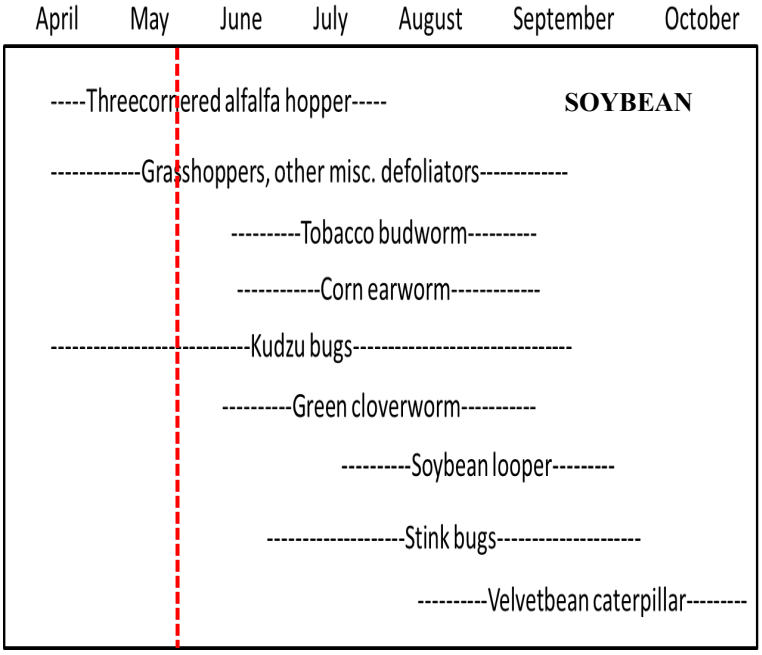
Finally, for cotton insects, we are picking up cotton aphids in our thrips sampling, so they are here also.

Check out this photo of an untreated cotton seedling found by our graduate student and technician that apparently hosted a threecornered alfalfa hopper (at least for the final larval molt). Notice the exoskeleton of the immature on the stem below the newly emerged adult – a "Where's Waldo" exercise.

Soybean Situation

As of 16 May 2021, the USDA NASS South Carolina Statistical Office estimated that about 43% of the crop has been planted, compared with 33% the previous week, 19% at this time last year, and 18% for the 5-year average. About 22% of the crop has emerged, compared with 5% the previous week, 9% at this time last year, and 6% for the 5-year average. These are observed/perceived state-wide averages.

Soybean Insects



Although it is still very early for insect issues in soybeans, I have already had calls about grasshoppers and lesser cornstalk borers (LCB). To avoid early problems with insects, it is a best management practice to not plant too soon after burndown or mechanical manipulation of weeds or cover crops. This can set up opportunities for insects to move from the weeds or cover crop onto emerging plants. We have mentioned in the newsletter previously that grasshoppers and threecornered alfalfa hoppers can be a problem early, especially if the "green bridge" is built for them to cross over.

Also, remember that any use of fire to burn off cover or residue before planting should also have a period of at least a couple of weeks before planting to avoid issues with lesser cornstalk borers. The burned areas actually enhance attraction of LCB female moths, especially in sandy fields under hot and dry conditions. We certainly meet those conditions almost everywhere in SC during the summer, and the weather forecasting says it will be very hot and dry next week. Rescue control of LCB in soybeans is erratic, so prevention is critical. Use of granular chlorpyrifos banded at planting is a preventative treatment, and foliar sprays of chlorpyrifos can help with rescue treatment, but, again, control is not guaranteed. See our 2021 Pest Management Handbook for detailed but scant recommendations. Here are some photos of LCB and the silk tubes they construct at or just under the soil line.

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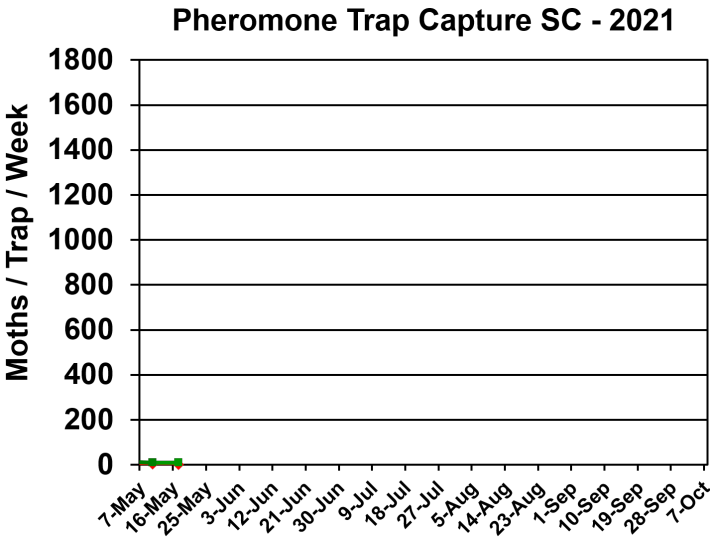
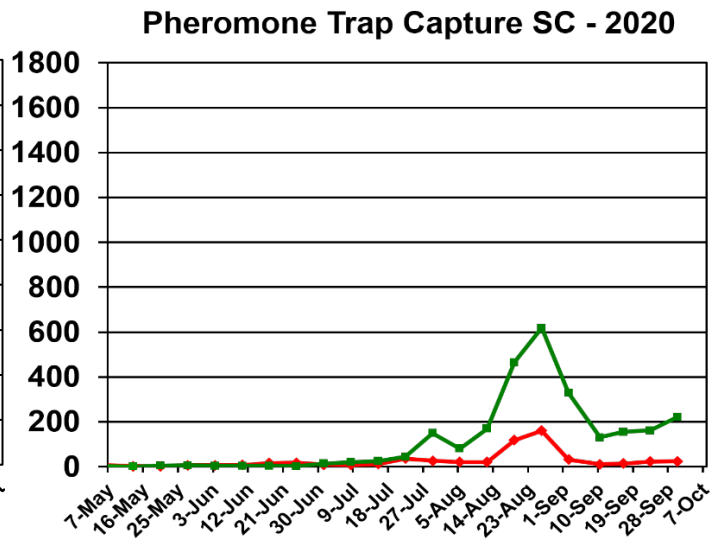
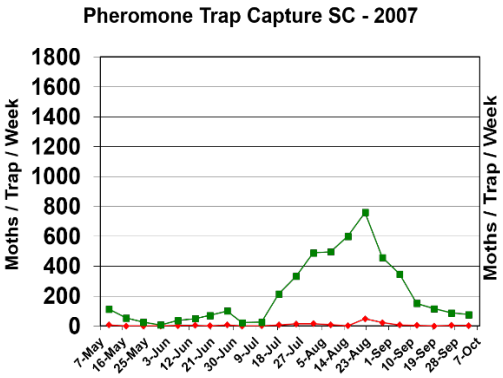
Bollworm & Tobacco Budworm

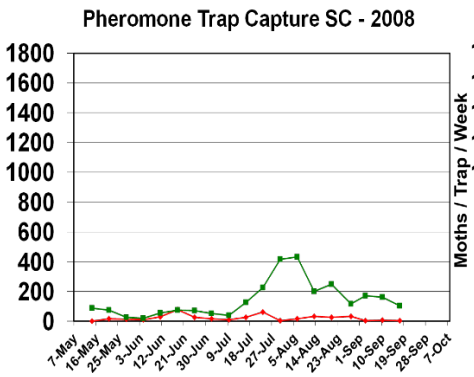
Captures of bollworm (BW) and tobacco budworm (TBW) moths in pheromone traps at EREC this season are shown below, as are the captures from 2007-2020 for reference. Tobacco budworm continues to be important for our soybean acres and for any acres of non-Bt cotton. I provide these data as a measure of moth presence and activity in our local area near my research plots. The numbers are not necessarily representative of the species throughout the state.

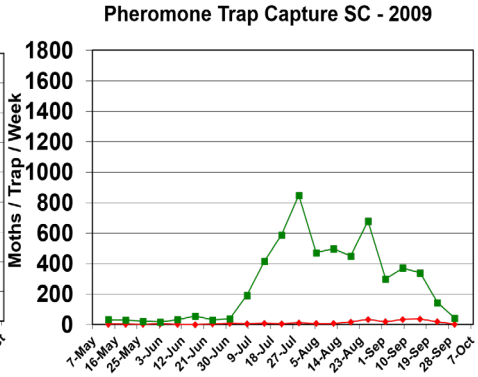




Trap data from 2007-2019 are shown below for reference to other years of trapping data from EREC:







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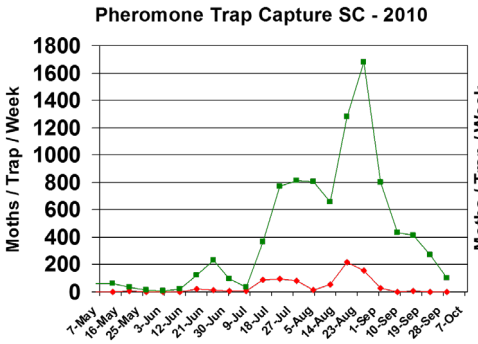
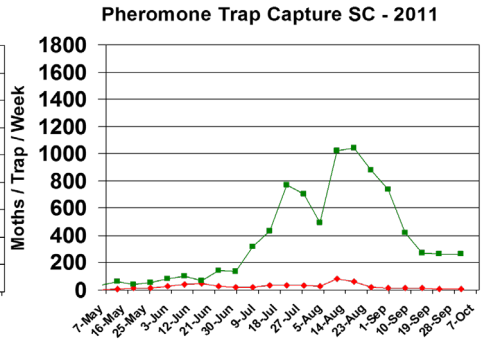
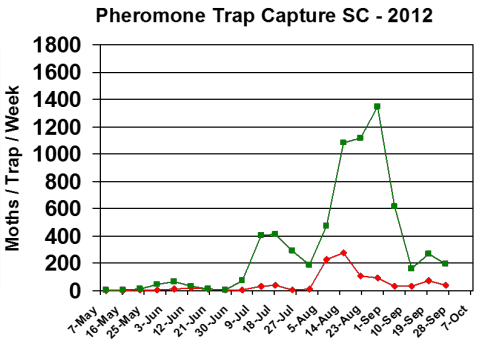
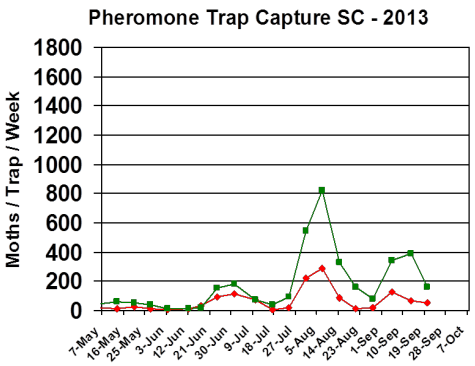
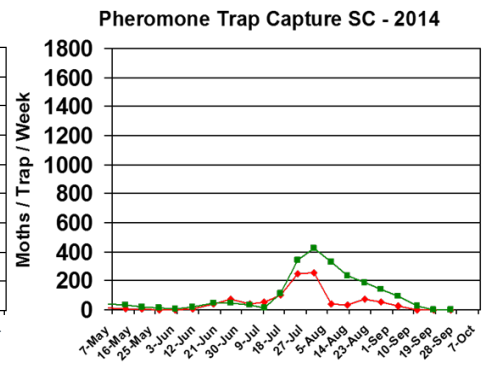
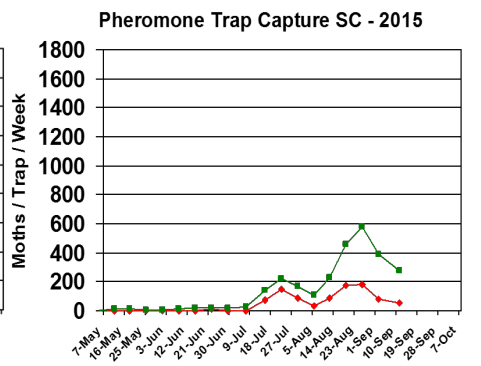


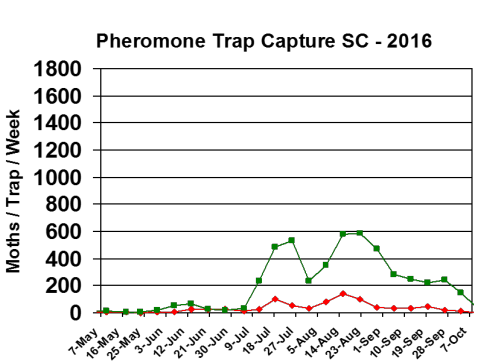


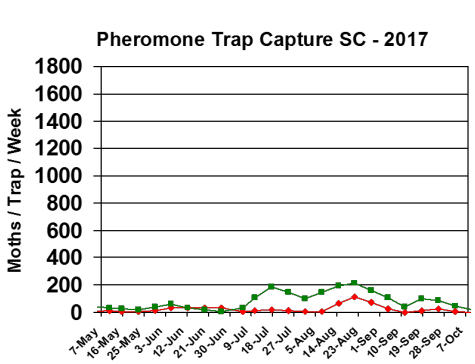


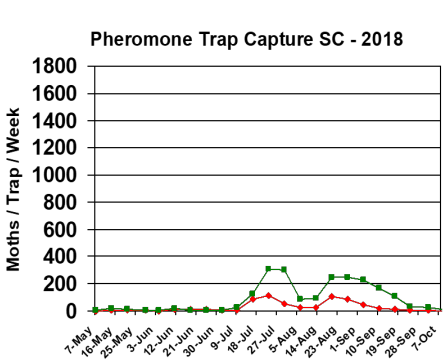


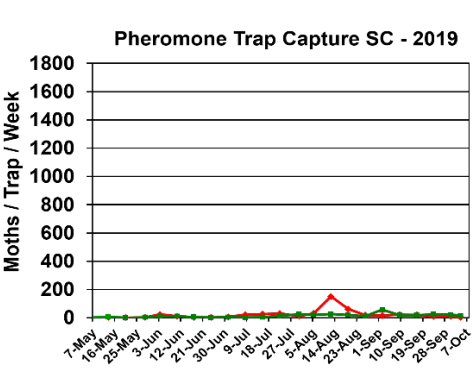








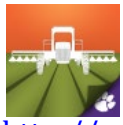




Pest Management Handbook – 2021

Insect control recommendations are available online in the 2021 South Carolina Pest Management Handbook at:
https://www.clemson.edu/extension/agronomy/pest%20management%20handbook.html

Free Mobile Apps: "Calibrate My Sprayer" and "Mix My Sprayer"



Download our free mobile apps called "Calibrate My Sprayer" and "Mix My Sprayer" that help check for proper calibration of spraying equipment and help you with mixing user-defined pesticides, respectively, in custom units (available in both iOS and Android formats):
http://www.clemson.edu/extension/mobile-apps/

Need More Information?

For more Clemson University Extension information: http://www.clemson.edu/extension/

For historical cotton/soybean insect newsletters:
https://www.clemson.edu/extension/agronomy/cotton1/newsletters.html

Sincerely,

Jeremy K. Greene, Ph.D.
Professor of Entomology

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